MAR 2 4 2006

PTO/SB/08a/b (07-05)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Sut	ostitute for form 1449A/B	/PTO		Complete If Known		
				Application Number	10/650592	
	SUPPL	.EMEN	TAL	Filing Date	August 27, 2003	
11	NFORMATIC	ON DIS	CLOSURE	First Named Inventor	Noubar B. Afeyan	
	TATEMENT			Art Unit	1652	
	(Use as many sheets as necessary)			Examiner Name	M. Y. Meah	
Sheet	1	of	1	Attorney Docket Number	COTH-P01-001	

	U.S. PATENT DOCUMENTS								
Examiner Initials*	Cite No.'	Document Number Number-Kind Code ² (il known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				
(X	AM	US 2004-081647	04-29-2004	Noubar et al.					

Г				FOREIG	GN PATENT	DOCUMENTS		
	kamini ilals*	er	Cite No.1	Foreign Patent Document Country Code ³ - Number ⁴ -Kind Code ³ (<i>il known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	76
	Ŕ	1	_	·	06-05-1997	The Regents of the University of California		
1	Û	/	ВІ	WO 02/097042	12-05-2002	The Trustees of the University of Pennsylvania		

*EXAMINER: initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as Indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
W.	CW	OYAKE et al., "Targeted substrate degradation by an engineered double RING ubiquitin ligase," Blochem Biophys Res Commun. 295:370-375, (2002).	
N.	CX	NYARUBUCHA et al., "Identification and Expression of the cDNA-encoding Human Mesotrypsin(ogen), an Isoform of Trypsin with Inhibitor Resistance," Journal of Biological Chemistry, 272(16):10573-10578, (1997).	
K)	CY	SMITH et al., "A detailed study of the substrate specificity of a chimeric restriction enzyme," Nucleic Acids Res. 27(2):674-681, (1999).	
W.	CZ	SZMOLA et al., "Human Mesotrypsin Is a Unique Digestive Protease Specialized for the Degradation of Trypsin Inhibitors," Journal of Biological Chemistry, 278(49):48580-48589, (2003).	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

		1)		1110
Examiner Signature	(Ma	Deli	Date Considered	4/4/06
		777			

^{&#}x27;Applicant's unique citation designation number (optional). ³Applicant is to place a check mark here if English language Translation is attached.

SARATA TRADE

PTO/SB/08a/b (07-05)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known Substitute for form 1449A/B/PTO 10/650592 Application Number INFORMATION DISCLOSURE Filing Date August 27, 2003 STATEMENT BY APPLICANT First Named Inventor Noubar B. Afeyan Art Unit 1652 (Use as many sheets as necessary) Examiner Name M. Y. Meah COTH-P01-001 Sheet 1 of 1 Attorney Docket Number

U.S. PATENT DOCUMENTS Pages, Columns, Lines, Where Document Number Publication Date Name of Patentee or Examiner Cite Relevant Passages or Relevant Figures Appear MM-DD-YYYY Applicant of Cited Document Number-Kind Code² (if known) No.1 12-09-2003 Bode et al. AK* US-6,660,492-B1 06-05-2003 Ellington et al. US-20030104520-A1 AL*

	FOREIGN PATENT DOCUMENTS							
Examiner Initials	Cite No.	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁴ (I known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶		
	BG	WO-03/022858	03-20-2003	NASCACELL GMBH				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. 'Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at www.usplo.gov or MPEP 901.04. 'Senter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.18 if possible. 'Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner Signature Date Considered 4/4/66		/	11/2)		[
	U	V	VV	M	414	16

^{&#}x27;Applicant's unique citation designation number (optional). ³Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Peperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number,

7	Substitute for form 1449A/I	з/РТО		Complete If Known		
•		-		Application Number	10/650592	
	INFORMATION	ID NC	SCLOSURE	Filing Date	August 27, 2003	
	NFORMATION DISCLOSUR STATEMENT BY APPLICAN	APPLICANT	First Named Inventor	Noubar B. Afeyan		
				Art Unit	1652	
	(Use as man)	sheets as	necessary)	Examiner Name	Saidha, Tekchand	
She	et 1	of	1	Attorney Docket Number	COTH-P01-001	

	U.S. PATENT DOCUMENTS										
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where						
Initiate	No.	Number-Kind Code ² (if known)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear						
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	AG	US-4,975,278	12-04-1990	Senter et al.							
199	AH	US-5,258,498	11-02-1993	Huston et al.							
1	Al	US-5,811,265	09-22-1998	Quertermous et al.							
U	AJ	US-5,961,973	10-05-1999	Crea							

	FOREIGN PATENT DOCUMENTS								
Examiner	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages				
Initials	No.1	Country Code ⁸ -Number ⁴ -Kind Code ⁸ (if known)	Date MM-DD-YYYY	Applicant of Cited Document	or Relevant Figures Appear	ľ			
	BF	WO 00/64485-A2	11-02-2000	Genencor International, Inc.					
				et al.	<u> </u>				

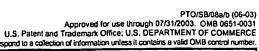
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent-Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Çite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	СТ	COLLEN, D., et al., "New thrombolytic agents and strategies," Bailliere's Clinical Haematology, 8(2):425-435 (1995).	
V	CU	HOLVOET, P., et al., "Characterization of a Chimeric Plasminogen Activator Consisting of a Single-chain Fv Fragment Derived from a Fibrin Fragment D-Dimer-specific Antibody and a Truncated Single-chain Urokinase," The Journal of Biological Chemistry, 266(29):19717-19724 (1991).	
70	CV	WAGNER, R., Copy of Untimely Filed Protest under 37 C.F.R. § 1.291.	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	\mathcal{A}_{10}		ŀ	ſ
Examiner Signature	//WWW	Date Considered	(4)	(Pb_
9780201 1	7			$\overline{}$

^{&#}x27;Applicant's unique citation designation number (optional). 'Applicant is to place a check mark here if English language Translation is attached.



Suit	stitute for form 1449A/E	3/PTO		Complete if Known			
501	Stille ID IONII 144070			Application Number	10/650592		
I IN	IFORMATIC	ON DI	SCLOSURE	Filing Date	August 27, 2003		
S	TATEMEN'	T BY	APPLICANT	First Named Inventor	Noubar B. Afeyan		
	., .,			Art Unit	1614		
	(Use as many	sheets as	necessary)	Examiner Name	Not Yet Assigned		
Sheet	1	of	2	Attorney Docket Number	COTH-P01-001		

PADEMAR

Г				U.S. PA	TENT DOCUMENTS		
_			Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where	
		Cite No.	Number-Kind Code ² (if known)		Applicant of Cited Document	Retevant Passages or Releva Figures Appear	
	T	AA-	2002/0019039-A1	02-14-2002	Davis et al.		
ſ	N	AB	4,671,958	06-09-1987	Rodwell et al.		
ţ	17	AC	5.935.823	08-10-1999	Fowlkes et al.		
_	24	AD	6,287,561	09-11-2001	Crea, R.		
۲	T	AE	6.383,775-B1	05-07-2002	Duff et al.		
		AF	6.399,355-B1	06-04-2002	Kwong et al.		

$\overline{}$		FOREI	GN PATENT	DOCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	 _T 6
		-WO 00/64485-A2	11-02-2000	Genencor International, Inc. et		
-	BB	-WO 90/02338-A1	03-08-1990	The General Hospital Corporation		
	ВС	-WO 01/42432-A2	06-14-2001	Medical Research Council		_
	BD	-WO 98/16633-A1	04-23-1998	Novo Nordisk A/S		L
	BE	-WO 02/055108-A1	07-18-2002	Centre National de la Recherche Scientifique et al.		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the senal number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
U	CA	Bayer, E.A. et al. Affinity Cleavage and Targeted Catalysisof Proteins Using the Avidin-Biotin System. Biochemistry 29, 11274-79 (1990).	
()	СВ	Bond, R. et al. Silicon Biotechnology: New Opportunities for Carbohydrate Science. Aust. J. Chem. 56, 7-11 (2003)	
V	CC	Bradbury, R.J. Protein Based Assembly of Nanoscale Parts. (May 1, 2003) Retrieved from http://www.aeiveos.com/-~bradbury/Papers/PBAoNP.html on 8/25/03	_
W	CD	Hosseini, M.W. Molecular Tectonics: From Simple Molecules to Complex Molecular Networks. Universite Louis Pasteur, Strasbourg, France	
	CE	Alvarez, S. Engineering Protein Molecules for the Ordered Structuring of Silica. National Nanofabrication Users Network, pp. 82-3.	
	CF	Davis, B.G. et al. Controlled Site-Selective Glycosylation of Proteins by a Combined Site- Directed Mutagenesis and Chemical Modification Approach. J. Org. Chem. 63, 9614-15 (1998)	
V	CG	Davis, B.G. et al. Selective Protein Degradation by Ligand-Targeted Enzymes: Towards the Creation of Catalytic Antagonists. ChemBioChem 4, 531-40 (2003)	
IV	СН	Freitas, Jr., R.A. Mechanoenzymes: A non-SPM-based approach to molecular	<u></u>

Examiner Signature	Date Considered	4/4 66



PTO/SB/08a/b (06-03)
Approved for use through 07/31/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE spond to a collection of information unless it contains a valid OMB control number.

	stitute for form 1449A/I	R/PTO		Complete if Known		
300	50.018 101 101111 1440741	J. 10		Application Number	10/650592	
IN	FORMATI	ON DI	SCLOSURE	Filing Date	August 27, 2003	
STATEMENT BY APPLICANT				First Named Inventor	Noubar B. Afeyan	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		2.0,	Art Unit	1614	
	(Use as many sheets as necessary)			Examiner Name	Not Yet Assigned	
Sheet	2	of	2	Attorney Docket Number	COTH-P01-001	

d		mechanoassembly (February 21, 2000) Retrieved from http://www.aeiveos.com/~bradbury/Authors/Engineering/Freitas-RA/MAnSPMBAtMM.html on 8/25/03	
	CI	Sumerel, et al. Biotechnology Provides a New Route to Semiconductors. 2003	_
	CJ	MacLennan, Bruce. Molecular Combinatory Computing for Nanostructure Synthesis and Control. Department of Computer Science, University of Tennessee	
	СК	Quake, S.R. et al. From Micro- to Nanofabrication with Soft Materials. Science 290, 1536-40 (November 24, 2000)	
	CL	Stupp, S.I. Self Assembly of Nanostructures and Functional Materials. Dept. of Materials Science and Engineering, Dept. of Chemistry, Feinberg Medical School, Northwestern University	
	СМ	Whaley, S.R. et al. Selection of peptides with semiconductor binding specificity for directed nanocrystal assembly. Nature 405, 665-68 (June 8, 2000)	
	CN	Zhou, Huan-Xlang. Quantitative Account of the Enhanced Affinity of Two Linked scFvs Specific for Different Epitopes on the Same Antigen. J. Mol. Biol. 329, 1-8 (2003)	
1	со	Maoz, R. et al. Self-Assembly and Nanofabrication: Is a Happy Marriage Possible? Department of Materials and Interfaces, The Weizmann Institute of Science, Rehovot, Israel	
1	СР	Lim et al. BCR/ABL inhibition by an escort/phosphatase fusion protein. PNAS 97(22): 12233-12238 (2000)	
	ca	Runge et al. Mol Biol Med Hybrid molecules: insights into plasminogen activator function. 1991 Apr 8(2):245-55	
	CR	Frankel et al. Diphtheria fusion protein therapy of chemoresistant malignancies. Curr Cancer Drug Targets 2(1), 19-36 (2002)	
0,	cs	Springer et al. Prodrugs of thymidylate synthase inhibitors: potential for antibody directed enzyme prodrug therapy (ADEPT). Anticancer-Drug-Des. 11(8), 625-36 (1996)	

^{*}EXAMINER: tritial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	// / » »		1	4.40
Examiner Signature	710mm	Date Considered	4	4/16

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.